

TRANSPORTATION  
**Revolution**  
5 Mississippi Valley  
Conference

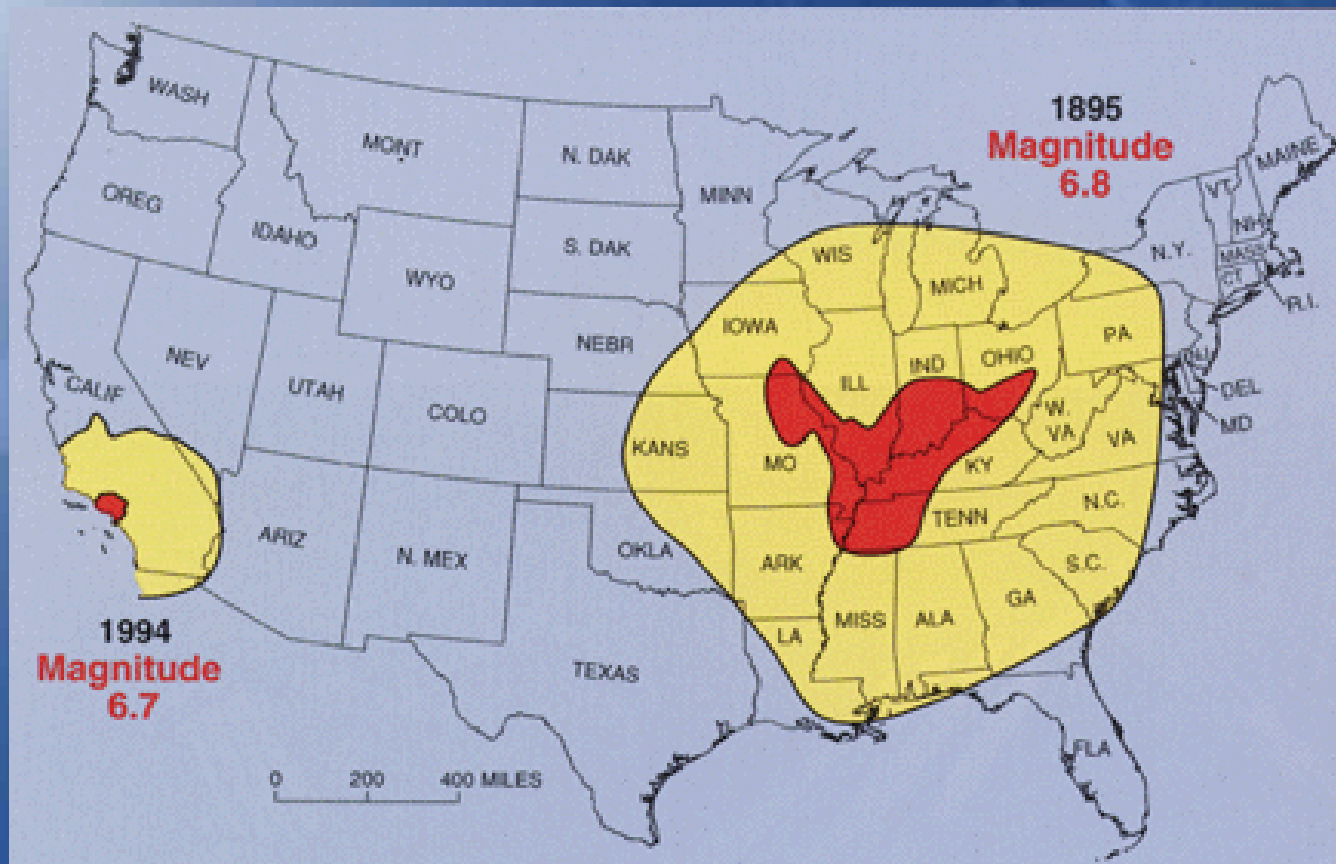
# MoDOT Emergency Communications



# Earthquake, Disaster and Emergency Communications and Support

- The Need:
  - Sustainable Communications Following a Major Emergency
  - Redundancy and Reliability (Every Day, All the Time)
  - Interoperability with Other Public Safety and Response Agencies
  - Trained Staff and Volunteers

# New Madrid Fault



# Earthquake, Disaster and Emergency Communications and Support

- Emergencies and Disasters:
  - Large Medical Emergency
  - Major Highway Incident
  - Plane Crash
  - Train Derailment
  - Large Area Release of Anthrax
  - Nuclear Power Plant Explosion
  - Major Flood
  - Major Earthquake in Southeast Missouri





# Earthquake, Disaster and Emergency Communications and Support

- Public Safety Interoperability
  - Multi-Agency Effort Led by Missouri Highway Patrol
  - MoDOT (Transportation!) is an Important Component
  - Current Focus is on Low Cost/No Cost Interoperability Using Existing Equipment
    - Most Agencies Operate in the Same VHF Band
    - Missouri VHF Interoperability Channels Available
    - Low Cost Solutions to Connect Existing Radio Systems Together



# Earthquake, Disaster and Emergency Communications and Support

- The How:
  - More Reliable and Redundant Existing Communications
    - Keep Existing Systems Maintained and Updated
    - Provide Tools, Equipment and Expertise to Correct Problems Quickly
    - Build in More Redundancy



# Earthquake, Disaster and Emergency Communications and Support

- The How:
  - Tools and Equipment to Augment When Needed
    - 3 - Mobile Emergency Response Operations Centers (MEROC)
      - St. Louis
      - South Central Missouri
      - Central Office – Jefferson City
    - Mobile Emergency Communications Vehicle (MERV)
    - Statewide Communications/Operations Center (SWOC)
    - 3 – Mobile Emergency Repeater Trailers (MERT)
    - Fixed Communications Centers in Western Missouri

# Earthquake, Disaster and Emergency Communications and Support

- The How:
  - Tools and Equipment to Augment When Needed (Cont.)
    - Satellite Internet Systems in all 10 MoDOT Districts (Future)
    - Radio System Enhancement Project
      - Will Build A Backup Communications System
        - » Using Existing Infrastructure
        - » Independent of Public Utilities





# Earthquake, Disaster and Emergency Communications and Support

- The How:
  - Training
    - Emergency Communications Training Project
      - 3 Levels of Training
      - Comprehensive Class
      - Train the Trainer

# Earthquake, Disaster and Emergency Communications and Support

- The How:
  - Outside Resources
    - Amateur Radio
      - Involvement in Training and Exercises
      - MOU
    - Other State Agencies
    - Federal Agencies
    - State and Local Emergency Management



# Earthquake, Disaster and Emergency Communications and Support



- Funding
  - Homeland Security Grants!
    - Over \$1 Million
  - State Funds
    - Aprox. \$300,000 Annually

# Mobile Emergency Response Operations Center (MEROC)

- 38' Trailer with 75' Tower
- Space for 5 Operators/Coordinators
- Satellite Communications (via Internet)
- Capability to Plot Maps, Aerial Photos
- On-Board Generator (5 Day Capacity)
- Extensive Radio Communications Capabilities



# MEROC





# Mobile Emergency Communications Vehicle (MERV)

- Medium Duty Truck
  - Sized to Pull MEROC Trailers
  - Equipment and Supply Storage Bed
  - 100 Gallon Fuel Capacity (Approx. 500 Mile Range)
- Space for 3 Operators/Coordinators
- Satellite Communications (via Internet)
- Robust Electrical System
- Extensive Radio Communications Capabilities



# Statewide Communications/Operations Center (SWOC)

- Companion to MEROC
- MoDOT Radio Communications
- “State Highway” Radio Console
- Radio Communications with Many Agencies
- Satellite Communications
- Starting Point for Fully Capable Statewide Operations Center



# QUESTIONS?



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